



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
KNOXVILLE ENVIRONMENTAL FIELD OFFICE
3711 MIDDLEBROOK PIKE
KNOXVILLE, TENNESSEE 37921-6538
PHONE (865) 594-6035 STATEWIDE 1-888-891-8332 FAX (865) 594-6105

January 20, 2017

Mr. John Mitchell, Operation Superintendent
Anderson County Water Authority
P.O. Box 70
Clinton, Tennessee 37717

RE: Sanitary Sewer Overflow (SSO) Inspection
ACWA Airbase STP
NPDES permit #TN0074071
Anderson County

Dear Mr. Mitchell:

On Friday, January 13, 2017, Hassan Sanaat and Woody Smith of the Division of Water Resources visited the Anderson County Water Authority (ACWA) Airbase Sewage Treatment Plant (STP) in order to conduct a sanitary sewer overflow (SSO) inspection on your NPDES program. Mr. Gary Sharp, Collection system and plant operator, represented the ACWA Airbase Sewage Treatment Plant (STP) during this inspection. The Division appreciates his help in providing the necessary information and a tour of the collection system during this inspection. Following is a report of this inspection:

System Description

ACWA Airbase STP serves an area of 3 square miles with 40 plus population. There are 27 residential, no commercial, and no industrial connections to the ACWA Airbase STP. There is no pretreatment program applicable and there is no industrial wastewater contribution. There are no satellite communities discharging into the ACWA Airbase STP system. This facility is not a combined sewer system, and Airbase STP is generally not responsible for customer lateral maintenance. Average annual precipitation is about forty (44) inches of rain. Mr. Gary Sharp is a Grade II collection system operator and responsible for ACWA Airbase STP collection system. Mr. Gary Sharp is the only person involved in the operation of wastewater plant and its collection system.

John Mitchell

1/20/2017

Page 2

System Inventory

There are 16 manholes and no pump stations and no cleanouts in the Airbase STP collection system. Pipe material for the collection system is mostly concrete and polyvinyl chloride (PVC).

System Performance

The problematic overflow areas include:

Flow meter pit discharge outflow at the wastewater treatment plant because of being under sized.

There were a total of three (4) sanitary sewer overflows (SSO's) reported in the last three years and none of them flowed into the waters of the State. Public warnings were not issued for these SSO's because the water system determined the warnings were not needed, but all four (4) SSO's were reported to the State.

Emergency/Corrective Maintenance

Emergency or corrective maintenance in the past three years included:

Four (4) dry-weather main line stoppages resulted in 5,000 gallons of wastewater overflows. No wet-weather manhole overflows were reported the last three (3) years. One main-line spot repair, three main line replacements and two manhole repairs were made.

Preventive Maintenance

Collection system inspection activities during the past three years included CCTV and visual manhole inspections. Some sewer lines were repaired, but this was not documented. Cleaning activities in the last three years included hydraulic jet cleaning and hand rodding.

Corrosion, grease, illegal dumping and odor did not present any significant problem issues. The significant problem issue included only tree roots.

Customer Service

About two (2) complaints per year are received which are mostly about odor and root stoppages. These complaints are typically answered within the utility's goal of 24 hours or as soon as possible. However, in 2014 a complaint was resolved in three (3) days while a complaint in 2015 was resolved in fifteen (15) days. Customer service record lacks "feedback to customer".

Emergency Preparedness

The ACWA Airbase STP Standard Operating Procedure includes a Sewer Overflow Response Plan (SORP) for responding to an SSO. Records include the following:

1. Event begin and end date & time
2. Cause(s) of event
3. Remediation / mitigation efforts
4. Clean-up method used
5. Description of the incident and its response
6. Location of SSO
7. Estimated volume of discharge

Procedures and Training

Procedures to clean up / mitigate SSO effects and SSO problem evaluations / solutions are followed as outlined in the Sewer Overflow Response Plan (SORP). There is a confined space entry program. Although, the system has no private-source (lateral) I&I reduction program, there are some exceptions to this policy. However, if the private-source is financially unable to fix I&I or root intrusions then the ACWA Airbase STP will conduct the necessary repairs.

Long term planning and rehabilitation

ACWA Airbase STP has not developed a Capacity, Management, Operation and Maintenance (CMOM) program for maintenance and repair of the wastewater treatment plant collection system. However, ACWA Airbase STP has an overall map of the collection system showing locations of manholes. Locations of past SSO's are not marked on these maps.

ACWA Airbase STP has a sewer use ordinance which includes limitations on fats, oils, and grease (FOG), a prohibition against direct storm water discharges, as well as restrictions on other illegal discharges. Presently, there is no in-house moratorium or

John Mitchell

1/20/2017

Page 4

restriction on additional flow in any part of system. There have not been any sewer extensions in the past three (3) years and no future extension is foreseen. Discussion regarding the city budget for the sewer system revealed that the budgets for water and sewer are separate, and revenue is less than expenses. Anderson County Water Authority (ACWA) has allocated \$80,000.00 per year budget toward the operation and maintenance of Airbase STP.

The facility does not have a sewer rate ordinance.

ACWA Airbase STP's current NPDES permit was issued on November 1, 2013. Its effective date is December 1, 2013 and expiration date is October 31, 2018. MOR's and records are kept on file for at least three (3) years.

Flow Measurements

There are no flow meters at any of the manholes. However, the wastewater treatment plant has installed an effluent flow meter. There also is no community tie-in or discharge point(s).

Field Inspection

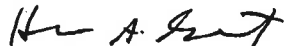
One (1) manhole with histories of overflows was inspected. There are no pump stations on the collection system. There was no evidence of any recent overflows at this manhole.

Conclusion

It is recommended that ACWA Airbase STP develop a collection system maintenance plan including identification of problem areas and a cleaning schedule.

Thank you for your cooperation. Should you have any comments or questions, please do not hesitate to call me at (865) 594-5591 or e-mail me Hassan.Sanaat@tn.gov.

Sincerely,



Hassan A. Sanaat

Division of Water Resources

e-copy: Enforcement and Compliance, DWR, Nashville